



**STATE OF TENNESSEE
DEPARTMENT OF HEALTH
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL
Lab Services - Jackson Regional Lab
Jackson, TN 38301
731-426-0686

TDH: Lab Services KRL
Lab Services - Knoxville Regional Lab
Knoxville, TN 37920
865-549-5201

TDH: Lab Services NCL
Lab Services - Nashville Central Lab
Nashville, TN 37243
615-262-6300

Sent To: Greg Denton
TDEC-WPC
6th Floor, L & C Tower Annex
401 Church Street
Nashville, TN 37243-1534

Michael Atchley
TDEC-WPC
Knoxville FO
3711 Middlebrook Pike
Knoxville, TN 37921

Lab ID: N00004606
Nashville Central Laboratory

Sampling Agency: TDEC: Division of Water Pollution Control

Billing Code: 327.34-20

This is to certify that the following results were determined using
good laboratory practices and in accordance with federal or state
approved methodologies.


Analytical Supervisor

Lab-Sample Number: N00004606001
Project Name:
Sample Description: EMORY Rr MILE 12.1
Sampler Project Name: TVA ASH SPILL
Project Site No.: 1
Station No.: EMORY012.1RO
Date/Time Collected: 06/02/2009 09:50
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/12/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations
pH: 7.79 pH Units
Chlorine, residual:
Conductivity: 100 uMHO
Temperature: 23.55
Dissolved Oxygen: 8.26 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	22	mg/L	3.8	10	M Chen	6/9/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	30	mg/L	0.7	1	P Leathers	6/9/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	6/3/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	6/5/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: N00004606002
Project Name:
Sample Description: EMORY 002.1RO
Sampler Project Name: TVA ASH SPILL
Project Site No.: 2
Station No.: EMORY 002.1RO
Date/Time Collected: 06/02/2009 11:01
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/30/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations
pH: 7.73 pH Units
Chlorine, residual:
Conductivity: 115 uMHO
Temperature: 25.24
Dissolved Oxygen: 8.96 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	34	mg/L	3.8	10	M Chen	6/9/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	29	mg/L	0.7	1	P Leathers	6/9/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	6/3/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	13	mg/L	10	10	A Peebles	6/5/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: N00004606003

Project Name:

Sample Description: APPROX 100' D/S FROM MIDDLE DREDGE PI

Sampler Project Name: TVA ASH SPILL

Project Site No.: 2A

Station No.: DREDGE PLUME

Date/Time Collected: 06/02/2009 11:09

Sampler's Name: GEOFF KLEIN

County: ROANE - 73

Sample Matrix: Water

EFO: Chattanooga

Sampling Agency: TDEC-WPC

Billing Code: 327.34-20

Send Report To: TDEC-WPC

Agency Invoiced: TDEC-WPC

Priority Date: 06/12/2009

Date/Time Received: 06/03/2009 09:05

Received By: L Barrociere

Field Determinations

pH: 7.68 pH Units

Chlorine, residual:

Conductivity: 117 uMHO

Temperature: 24.85

Dissolved Oxygen: 9.01 mg/L

Other:

Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	33	mg/L	3.8	10	M Chen	6/9/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	31	mg/L	0.7	1	P Leathers	6/9/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	6/3/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	10	mg/L	10	10	A Peebles	6/5/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: N00004606004

Project Name:

Sample Description: EMORY Rr MILE 1.9 AT UNDERWATER WEIR

Sampler Project Name: TVA ASH SPILL

Project Site No.: 2B

Station No.: EMORY001.9RO

Date/Time Collected: 06/02/2009 11:18

Sampler's Name: GEOFF KLEIN

County: ROANE - 73

Sample Matrix: Water

EFO: Chattanooga

Sampling Agency: TDEC-WPC

Billing Code: 327.34-20

Send Report To: TDEC-WPC

Agency Invoiced: TDEC-WPC

Priority Date: 06/12/2009

Date/Time Received: 06/03/2009 09:05

Received By: L Barrociere

Field Determinations

pH: 8.27 pH Units

Chlorine, residual:

Conductivity: 192 uMHO

Temperature: 23.59

Dissolved Oxygen: 10.91 mg/L

Other:

Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	81	mg/L	3.8	10	M Chen	6/9/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	68	mg/L	0.7	1	P Leathers	6/9/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	6/3/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	6/5/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: N00004606005
Project Name:
Sample Description: EMORY Rr MILE 1.7
Sampler Project Name: TVA ASH SPILL
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 06/02/2009 11:26
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/12/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations
pH: 8.65 pH Units
Chlorine, residual:
Conductivity: 220 uMHO
Temperature: 24.80
Dissolved Oxygen: 12.41 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	110	mg/L	3.8	10	M Chen	6/9/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	86	mg/L	0.7	1	P Leathers	6/9/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	6/3/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	6/5/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: N00004606006
Project Name:
Sample Description: EMORY Rr MILE 0.1
Sampler Project Name: TVA ASH SPILL
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 06/02/2009 11:37
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/12/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations
pH: 8.60 pH Units
Chlorine, residual:
Conductivity: 224 uMHO
Temperature: 24.47
Dissolved Oxygen: 11.93 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	100	mg/L	3.8	10	M Chen	6/9/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	79	mg/L	0.7	1	P Leathers	6/9/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	6/3/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	6/5/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: N00004606007
Project Name:
Sample Description: EMORY Rr MILE 0.1/FIELD DUPL.
Sampler Project Name: TVA ASH SPILL
Project Site No.: 4 FD
Station No.: EMORY000.1RO
Date/Time Collected: 06/02/2009 11:37
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/12/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations
pH: 8.60 pH Units
Chlorine, residual:
Conductivity: 224 uMHO
Temperature: 24.47
Dissolved Oxygen: 11.93 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	100	mg/L	3.8	10	M Chen	6/9/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	85	mg/L	0.7	1	P Leathers	6/9/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	6/3/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	10	mg/L	10	10	A Peebles	6/5/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: N00004606008
Project Name:
Sample Description: EMORY Rr MILE 0.1/FIELD BLANK
Sampler Project Name: TVA ASH SPILL
Project Site No.: 4 FB
Station No.: EMORY000.1RO
Date/Time Collected: 06/02/2009 11:37
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/12/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	U	mg/L	3.8	10	M Chen	6/9/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	U	mg/L	0.7	1	P Leathers	6/9/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	6/5/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: N00004606009
Project Name:
Sample Description: CLINCH Rr MILE 2.3
Sampler Project Name: TVA ASH SPILL
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 06/02/2009 11:50
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/12/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations
pH: 8.33 pH Units
Chlorine, residual:
Conductivity: 225 uMHO
Temperature: 23.80
Dissolved Oxygen: 11.40 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	73	mg/L	3.8	10	M Chen	6/9/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	57	mg/L	0.7	1	P Leathers	6/9/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	6/3/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peeples	6/5/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: N00004606010
Project Name:
Sample Description: CLINCH Rr TVA DISCHARGE POINT
Sampler Project Name: TVA ASH SPILL
Project Site No.: 5A
Station No.: KINGASHOUTF2
Date/Time Collected: 06/02/2009 11:59
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/12/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations
pH: 8.09 pH Units
Chlorine, residual:
Conductivity: 223 uMHO
Temperature: 23.88
Dissolved Oxygen: 10.42 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	80	mg/L	3.8	10	M Chen	6/9/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	62	mg/L	0.7	1	P Leathers	6/9/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	6/3/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	10	mg/L	10	10	A Peebles	6/5/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: N00004606011

Project Name:

Sample Description: CLINCH Rr MILE 4.5 NEAR SUGAR GROVE V.

Sampler Project Name: TVA ASH SPILL

Project Site No.: 6

Station No.: CLINC004.5RO

Date/Time Collected: 06/02/2009 12:10

Sampler's Name: GEOFF KLEIN

County: ROANE - 73

Sample Matrix: Water

EFO: Chattanooga

Sampling Agency: TDEC-WPC

Billing Code: 327.34-20

Send Report To: TDEC-WPC

Agency Invoiced: TDEC-WPC

Priority Date: 06/12/2009

Date/Time Received: 06/03/2009 09:05

Received By: L Barrociere

Field Determinations

pH: 8.44 pH Units

Chlorine, residual:

Conductivity: 224 uMHO

Temperature: 23.88

Dissolved Oxygen: 11.75 mg/L

Other:

Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	94	mg/L	3.8	10	M Chen	6/9/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	77	mg/L	0.7	1	P Leathers	6/9/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	6/3/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	6/5/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected



**STATE OF TENNESSEE
DEPARTMENT OF HEALTH
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL
Lab Services - Jackson Regional Lab
Jackson, TN 38301
731-426-0686

TDH: Lab Services KRL
Lab Services - Knoxville Regional Lab
Knoxville, TN 37920
865-549-5201

TDH: Lab Services NCL
Lab Services - Nashville Central Lab
Nashville, TN 37243
615-262-6300

Sent To: Greg Denton
TDEC-WPC
6th Floor, L & C Tower Annex
401 Church Street
Nashville, TN 37243-1534

Michael Atchley
TDEC-WPC
Knoxville FO
3711 Middlebrook Pike
Knoxville, TN 37921

Lab ID: N00004606
Nashville Central Laboratory

Sampling Agency: TDEC: Division of Water Pollution Control

Billing Code: 327.34-20

This is to certify that the following results were determined using good laboratory practices and in accordance with federal or state approved methodologies.

Analytical Supervisor

Lab-Sample Number: N00004606001
Project Name:
Sample Description: EMORY Rr MILE 12.1
Sampler Project Name: TVA ASH SPILL
Project Site No.: 1
Station No.: EMORY012.1RO
Date/Time Collected: 06/02/2009 09:50
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/30/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations
pH: 7.79 pH Units
Chlorine, residual:
Conductivity: 100 uMHO
Temperature: 23.55
Dissolved Oxygen: 8.26 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	06/04/2009				S Ufegbu	6/4/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	220	µg/L	2.9	10	A Bass	6/27/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	80	µg/L	6.4	10	A Wilson	6/20/2009
Antimony	0.45J	µg/L	0.33	1	A Wilson	6/20/2009
Arsenic	U	µg/L	0.93	5	A Wilson	6/20/2009
Barium	30	µg/L	2.5	5	A Wilson	6/20/2009
Beryllium	U	µg/L	0.11	1	A Wilson	6/20/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/20/2009
Chromium	6.2	µg/L	2.0	5	A Wilson	6/20/2009
Cobalt	0.22J	µg/L	0.04	1	A Wilson	6/20/2009
Copper	2.5	µg/L	0.38	1	A Wilson	6/20/2009
Lead	U	µg/L	0.10	1	A Wilson	6/20/2009
Manganese	38	µg/L	0.42	1	A Wilson	6/20/2009
Nickel	1.5	µg/L	0.25	1	A Wilson	6/20/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/20/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/20/2009
Thallium	U	µg/L	0.03	1	A Wilson	6/20/2009
Vanadium	U	µg/L	3.4	5	A Wilson	6/20/2009
Zinc	U	µg/L	1.9	5	A Wilson	6/20/2009

Lab-Sample Number: N00004606001
Project Name:
Sample Description: EMORY Rr MILE 12.1
Sampler Project Name: TVA ASH SPILL
Project Site No.: 1
Station No.: EMORY012.1RO
Date/Time Collected: 06/02/2009 09:50
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/30/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations
pH: 7.79 pH Units
Chlorine, residual:
Conductivity: 100 uMHO
Temperature: 23.55
Dissolved Oxygen: 8.26 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.070J	µg/L	0.029	0.2	A Wilson	6/9/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: N00004606002
Project Name:
Sample Description: EMORY 002.1RO
Sampler Project Name: TVA ASH SPILL
Project Site No.: 2
Station No.: EMORY 002.1RO
Date/Time Collected: 06/02/2009 11:01
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/30/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrocieri

Field Determinations
pH: 7.73 pH Units
Chlorine, residual:
Conductivity: 115 uMHO
Temperature: 25.24
Dissolved Oxygen: 8.96 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	06/04/2009				S Ufegbu	6/4/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	400	µg/L	2.9	10	A Bass	6/27/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	670	µg/L	6.4	10	A Wilson	6/20/2009
Antimony	U	µg/L	0.33	1	A Wilson	6/20/2009
Arsenic	5.0	µg/L	0.93	5	A Wilson	6/20/2009
Barium	55	µg/L	2.5	5	A Wilson	6/20/2009
Beryllium	0.12J	µg/L	0.11	1	A Wilson	6/20/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/20/2009
Chromium	3.3J	µg/L	2.0	5	A Wilson	6/20/2009
Cobalt	0.62J	µg/L	0.04	1	A Wilson	6/20/2009
Copper	2.4	µg/L	0.38	1	A Wilson	6/20/2009
Lead	0.30J	µg/L	0.10	1	A Wilson	6/20/2009
Manganese	56	µg/L	0.42	1	A Wilson	6/20/2009
Nickel	2.0	µg/L	0.25	1	A Wilson	6/20/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/20/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/20/2009
Thallium	0.096J	µg/L	0.03	1	A Wilson	6/20/2009
Vanadium	U	µg/L	3.4	5	A Wilson	6/20/2009
Zinc	U	µg/L	1.9	5	A Wilson	6/20/2009

Lab-Sample Number: N00004606002
Project Name:
Sample Description: EMORY 002.1RO
Sampler Project Name: TVA ASH SPILL
Project Site No.: 2
Station No.: EMORY 002.1RO
Date/Time Collected: 06/02/2009 11:01
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/30/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations

pH: 7.73 pH Units
Chlorine, residual:
Conductivity: 115 uMHO
Temperature: 25.24
Dissolved Oxygen: 8.96 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Wilson	6/9/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: N00004606003

Project Name:

Sample Description: APPROX 100' D/S FROM MIDDLE DREDGE PI

Sampler Project Name: TVA ASH SPILL

Project Site No.: 2A

Station No.: DREDGE PLUME

Date/Time Collected: 06/02/2009 11:09

Sampler's Name: GEOFF KLEIN

County: ROANE - 73

Sample Matrix: Water

EFO: Chattanooga

Sampling Agency: TDEC-WPC

Billing Code: 327.34-20

Send Report To: TDEC-WPC

Agency Invoiced: TDEC-WPC

Priority Date: 06/30/2009

Date/Time Received: 06/03/2009 09:05

Received By: L Barrociere

Field Determinations

pH: 7.68 pH Units

Chlorine, residual:

Conductivity: 117 uMHO

Temperature: 24.85

Dissolved Oxygen: 9.01 mg/L

Other:

Flow: CFS

TEST: Digestion Metals

METHOD: EPA 200.2

ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	06/04/2009				S Ufegbu	6/4/2009

TEST: ICP

METHOD: EPA 200.7

ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	270	µg/L	2.9	10	A Bass	6/27/2009

TEST: ICP-MS

METHOD: EPA 200.8

ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	430	µg/L	6.4	10	A Wilson	6/20/2009
Antimony	U	µg/L	0.33	1	A Wilson	6/20/2009
Arsenic	3.4J	µg/L	0.93	5	A Wilson	6/20/2009
Barium	50	µg/L	2.5	5	A Wilson	6/20/2009
Beryllium	U	µg/L	0.11	1	A Wilson	6/20/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/20/2009
Chromium	2.2J	µg/L	2.0	5	A Wilson	6/20/2009
Cobalt	0.42J	µg/L	0.04	1	A Wilson	6/20/2009
Copper	4.4	µg/L	0.38	1	A Wilson	6/20/2009
Lead	0.75J	µg/L	0.10	1	A Wilson	6/20/2009
Manganese	52	µg/L	0.42	1	A Wilson	6/20/2009
Nickel	1.5	µg/L	0.25	1	A Wilson	6/20/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/20/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/20/2009
Thallium	0.067J	µg/L	0.03	1	A Wilson	6/20/2009
Vanadium	U	µg/L	3.4	5	A Wilson	6/20/2009
Zinc	U	µg/L	1.9	5	A Wilson	6/20/2009

Lab-Sample Number: N00004606003

Project Name:

Sample Description: APPROX 100' D/S FROM MIDDLE DREDGE P

Sampler Project Name: TVA ASH SPILL

Project Site No.: 2A

Station No.: DREDGE PLUME

Date/Time Collected: 06/02/2009 11:09

Sampler's Name: GEOFF KLEIN

County: ROANE - 73

Sample Matrix: Water

EFO: Chattanooga

Sampling Agency: TDEC-WPC

Billing Code: 327.34-20

Send Report To: TDEC-WPC

Agency Invoiced: TDEC-WPC

Priority Date: 06/30/2009

Date/Time Received: 06/03/2009 09:05

Received By: L Barrociere

Field Determinations

pH: 7.68 pH Units

Chlorine, residual:

Conductivity: 117 uMHO

Temperature: 24.85

Dissolved Oxygen: 9.01 mg/L

Other:

Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.050J	µg/L	0.029	0.2	A Wilson	6/9/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: N00004606004

Project Name:

Sample Description: EMORY Rr MILE 1.9 AT UNDERWATER WEIR

Sampler Project Name: TVA ASH SPILL

Project Site No.: 2B

Station No.: EMORY001.9RO

Date/Time Collected: 06/02/2009 11:18

Sampler's Name: GEOFF KLEIN

County: ROANE - 73

Sample Matrix: Water

EFO: Chattanooga

Sampling Agency: TDEC-WPC

Billing Code: 327.34-20

Send Report To: TDEC-WPC

Agency Invoiced: TDEC-WPC

Priority Date: 06/30/2009

Date/Time Received: 06/03/2009 09:05

Received By: L Barrociere

Field Determinations

pH: 8.27 pH Units

Chlorine, residual:

Conductivity: 192 uMHO

Temperature: 23.59

Dissolved Oxygen: 10.91 mg/L

Other:

Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE
Digestion Metals	06/04/2009				S Ufegbu	6/4/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE
Iron	240	µg/L	2.9	10	A Bass	6/27/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE
Aluminum	340	µg/L	6.4	10	A Wilson	6/20/2009
Antimony	U	µg/L	0.33	1	A Wilson	6/20/2009
Arsenic	2.0J	µg/L	0.93	5	A Wilson	6/20/2009
Barium	44	µg/L	2.5	5	A Wilson	6/20/2009
Beryllium	U	µg/L	0.11	1	A Wilson	6/20/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/20/2009
Chromium	U	µg/L	2.0	5	A Wilson	6/20/2009
Cobalt	0.36J	µg/L	0.04	1	A Wilson	6/20/2009
Copper	3.3	µg/L	0.38	1	A Wilson	6/20/2009
Lead	0.38J	µg/L	0.10	1	A Wilson	6/20/2009
Manganese	46	µg/L	0.42	1	A Wilson	6/20/2009
Nickel	1.9	µg/L	0.25	1	A Wilson	6/20/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/20/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/20/2009
Thallium	0.039J	µg/L	0.03	1	A Wilson	6/20/2009
Vanadium	U	µg/L	3.4	5	A Wilson	6/20/2009
Zinc	U	µg/L	1.9	5	A Wilson	6/20/2009

Lab-Sample Number: N00004606004

Project Name:

Sample Description: EMORY Rr MILE 1.9 AT UNDERWATER WEIR

Sampler Project Name: TVA ASH SPILL

Project Site No.: 2B

Station No.: EMORY001.9RO

Date/Time Collected: 06/02/2009 11:18

Sampler's Name: GEOFF KLEIN

County: ROANE - 73

Sample Matrix: Water

EFO: Chattanooga

Sampling Agency: TDEC-WPC

Billing Code: 327.34-20

Send Report To: TDEC-WPC

Agency Invoiced: TDEC-WPC

Priority Date: 06/30/2009

Date/Time Received: 06/03/2009 09:05

Received By: L Barrociere

Field Determinations

pH: 8.27 pH Units

Chlorine, residual: 192 uMHO

Conductivity: 23.59

Temperature: 10.91 mg/L

Dissolved Oxygen: 10.91

Other: CFS

Flow:

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.050J	µg/L	0.029	0.2	A Wilson	6/9/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: N00004606005
Project Name:
Sample Description: EMORY Rr MILE 1.7
Sampler Project Name: TVA ASH SPILL
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 06/02/2009 11:26
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/30/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations
pH: 8.65 pH Units
Chlorine, residual:
Conductivity: 220 uMHO
Temperature: 24.80
Dissolved Oxygen: 12.41 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	06/04/2009				S Ufegbu	6/4/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	230	µg/L	2.9	10	A Bass	6/27/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	300	µg/L	6.4	10	A Wilson	6/20/2009
Antimony	U	µg/L	0.33	1	A Wilson	6/20/2009
Arsenic	1.6J	µg/L	0.93	5	A Wilson	6/20/2009
Barium	42	µg/L	2.5	5	A Wilson	6/20/2009
Beryllium	U	µg/L	0.11	1	A Wilson	6/20/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/20/2009
Chromium	2.4J	µg/L	2.0	5	A Wilson	6/20/2009
Cobalt	0.37J	µg/L	0.04	1	A Wilson	6/20/2009
Copper	2.9	µg/L	0.38	1	A Wilson	6/20/2009
Lead	0.46J	µg/L	0.10	1	A Wilson	6/20/2009
Manganese	55	µg/L	0.42	1	A Wilson	6/20/2009
Nickel	2.2	µg/L	0.25	1	A Wilson	6/20/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/20/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/20/2009
Thallium	0.061J	µg/L	0.03	1	A Wilson	6/20/2009
Vanadium	U	µg/L	3.4	5	A Wilson	6/20/2009
Zinc	U	µg/L	1.9	5	A Wilson	6/20/2009

Lab-Sample Number: N00004606005
Project Name:
Sample Description: EMORY Rr MILE 1.7
Sampler Project Name: TVA ASH SPILL
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 06/02/2009 11:26
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/30/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations
pH: 8.65 pH Units
Chlorine, residual:
Conductivity: 220 uMHO
Temperature: 24.80
Dissolved Oxygen: 12.41 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.050J	µg/L	0.029	0.2	A Wilson	6/9/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: N00004606006
Project Name:
Sample Description: EMORY Rr MILE 0.1
Sampler Project Name: TVA ASH SPILL
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 06/02/2009 11:37
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/30/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations
pH: 8.60 pH Units
Chlorine, residual:
Conductivity: 224 uMHO
Temperature: 24.47
Dissolved Oxygen: 11.93 mg/L
Other:
Flow: CFS

TEST: Digestion Metals			METHOD: EPA 200.2			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	06/04/2009				S Ufegbu	6/4/2009

TEST: ICP			METHOD: EPA 200.7			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	210	µg/L	2.9	10	A Bass	6/27/2009

TEST: ICP-MS			METHOD: EPA 200.8			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	270	µg/L	64.0	100	A Wilson	6/20/2009
Antimony	U	µg/L	0.33	1	A Wilson	6/20/2009
Arsenic	U	µg/L	0.93	5	A Wilson	6/20/2009
Barium	37	µg/L	2.5	5	A Wilson	6/20/2009
Beryllium	U	µg/L	0.11	1	A Wilson	6/20/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/20/2009
Chromium	2.4J	µg/L	2.0	5	A Wilson	6/20/2009
Cobalt	0.30J	µg/L	0.04	1	A Wilson	6/20/2009
Copper	3.0	µg/L	0.38	1	A Wilson	6/20/2009
Lead	0.41J	µg/L	0.10	1	A Wilson	6/20/2009
Manganese	39	µg/L	0.42	1	A Wilson	6/20/2009
Nickel	2.0	µg/L	0.25	1	A Wilson	6/20/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/20/2009
Silver	0.042J	µg/L	0.03	0.25	A Wilson	6/20/2009
Thallium	U	µg/L	0.03	1	A Wilson	6/20/2009
Vanadium	U	µg/L	3.4	5	A Wilson	6/20/2009
Zinc	U	µg/L	1.9	5	A Wilson	6/20/2009

Lab-Sample Number: N00004606006
Project Name:
Sample Description: EMORY Rr MILE 0.1
Sampler Project Name: TVA ASH SPILL
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 06/02/2009 11:37
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/30/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations

pH: 8.60 pH Units
Chlorine, residual:
Conductivity: 224 uMHO
Temperature: 24.47
Dissolved Oxygen: 11.93 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.040J	µg/L	0.029	0.2	A Wilson	6/9/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: N00004606007
Project Name:
Sample Description: EMORY Rr MILE 0.1/FIELD DUPL.
Sampler Project Name: TVA ASH SPILL
Project Site No.: 4 FD
Station No.: EMORY000.1RO
Date/Time Collected: 06/02/2009 11:37
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/30/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations
pH: 8.60 pH Units
Chlorine, residual:
Conductivity: 224 uMHO
Temperature: 24.47
Dissolved Oxygen: 11.93 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	06/04/2009				S Ufegbu	6/4/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	220	µg/L	2.9	10	A Bass	6/27/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	280	µg/L	64.0	100	A Wilson	6/20/2009
Antimony	U	µg/L	0.33	1	A Wilson	6/20/2009
Arsenic	U	µg/L	0.93	5	A Wilson	6/20/2009
Barium	40	µg/L	2.5	5	A Wilson	6/20/2009
Beryllium	U	µg/L	0.11	1	A Wilson	6/20/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/20/2009
Chromium	2.6J	µg/L	2.0	5	A Wilson	6/20/2009
Cobalt	0.32J	µg/L	0.04	1	A Wilson	6/20/2009
Copper	2.5	µg/L	0.38	1	A Wilson	6/20/2009
Lead	0.39J	µg/L	0.10	1	A Wilson	6/20/2009
Manganese	39	µg/L	0.42	1	A Wilson	6/20/2009
Nickel	2.4	µg/L	0.25	1	A Wilson	6/20/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/20/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/20/2009
Thallium	U	µg/L	0.03	1	A Wilson	6/20/2009
Vanadium	U	µg/L	3.4	5	A Wilson	6/20/2009
Zinc	U	µg/L	1.9	5	A Wilson	6/20/2009

Lab-Sample Number: N00004606007
Project Name:
Sample Description: EMORY Rr MILE 0.1/FIELD DUPL.
Sampler Project Name: TVA ASH SPILL
Project Site No.: 4 FD
Station No.: EMORY000.1RO
Date/Time Collected: 06/02/2009 11:37
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/30/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations

pH: 8.60 pH Units
Chlorine, residual:
Conductivity: 224 uMHO
Temperature: 24.47
Dissolved Oxygen: 11.93 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.030J	µg/L	0.029	0.2	A Wilson	6/9/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: N00004606008
Project Name:
Sample Description: EMORY Rr MILE 0.1/FIELD BLANK
Sampler Project Name: TVA ASH SPILL
Project Site No.: 4 FB
Station No.: EMORY000.1RO
Date/Time Collected: 06/02/2009 11:37
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/30/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

TEST: Digestion Metals			METHOD: EPA 200.2			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	06/04/2009				S Ufegbu	6/4/2009

TEST: ICP			METHOD: EPA 200.7			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	3.1J	µg/L	2.9	10	A Bass	6/27/2009

TEST: ICP-MS			METHOD: EPA 200.8			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	U	µg/L	6.4	10	A Wilson	6/20/2009
Antimony	U	µg/L	0.33	1	A Wilson	6/20/2009
Arsenic	U	µg/L	0.93	5	A Wilson	6/20/2009
Barium	U	µg/L	2.5	5	A Wilson	6/20/2009
Beryllium	U	µg/L	0.11	1	A Wilson	6/20/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/20/2009
Chromium	8.7	µg/L	2.0	5	A Wilson	6/20/2009
Cobalt	U	µg/L	0.04	1	A Wilson	6/20/2009
Copper	U	µg/L	0.38	1	A Wilson	6/20/2009
Lead	U	µg/L	0.10	1	A Wilson	6/20/2009
Manganese	1.1	µg/L	0.42	1	A Wilson	6/20/2009
Nickel	U	µg/L	0.25	1	A Wilson	6/20/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/20/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/20/2009
Thallium	U	µg/L	0.03	1	A Wilson	6/20/2009
Vanadium	U	µg/L	3.4	5	A Wilson	6/20/2009
Zinc	U	µg/L	1.9	5	A Wilson	6/20/2009

Lab-Sample Number: N00004606008
Project Name:
Sample Description: EMORY Rr MILE 0.1/FIELD BLANK
Sampler Project Name: TVA ASH SPILL
Project Site No.: 4 FB
Station No.: EMORY000.1RO
Date/Time Collected: 06/02/2009 11:37
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/30/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations

pH:

Chlorine, residual:

Conductivity:

Temperature:

Dissolved Oxygen:

Other:

Flow:

CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MLQ	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Wilson	6/9/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: N00004606009

Project Name:

Sample Description: CLINCH Rr MILE 2.3

Sampler Project Name: TVA ASH SPILL

Project Site No.: 5

Station No.: CLINC002.3RO

Date/Time Collected: 06/02/2009 11:50

Sampler's Name: GEOFF KLEIN

County: ROANE - 73

Sample Matrix: Water

EFO: Chattanooga

Sampling Agency: TDEC-WPC

Billing Code: 327.34-20

Send Report To: TDEC-WPC

Agency Invoiced: TDEC-WPC

Priority Date: 06/30/2009

Date/Time Received: 06/03/2009 09:05

Received By: L Barrociere

Field Determinations

pH: 8.33 pH Units

Chlorine, residual:

Conductivity: 225 uMHO

Temperature: 23.80

Dissolved Oxygen: 11.40 mg/L

Other:

Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	06/04/2009				S Ufegbu	6/4/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	170	µg/L	2.9	10	A Bass	6/27/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	200	µg/L	6.4	10	A Wilson	6/20/2009
Antimony	U	µg/L	0.33	1	A Wilson	6/20/2009
Arsenic	U	µg/L	0.93	5	A Wilson	6/20/2009
Barium	35	µg/L	2.5	5	A Wilson	6/20/2009
Beryllium	U	µg/L	0.11	1	A Wilson	6/20/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/20/2009
Chromium	3.2J	µg/L	2.0	5	A Wilson	6/20/2009
Cobalt	0.26J	µg/L	0.04	1	A Wilson	6/20/2009
Copper	3.5	µg/L	0.38	1	A Wilson	6/20/2009
Lead	0.36J	µg/L	0.10	1	A Wilson	6/20/2009
Manganese	30	µg/L	0.42	1	A Wilson	6/20/2009
Nickel	1.4	µg/L	0.25	1	A Wilson	6/20/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/20/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/20/2009
Thallium	U	µg/L	0.03	1	A Wilson	6/20/2009
Vanadium	U	µg/L	3.4	5	A Wilson	6/20/2009
Zinc	U	µg/L	1.9	5	A Wilson	6/20/2009

Lab-Sample Number: N00004606009
Project Name:
Sample Description: CLINCH Rr MILE 2.3
Sampler Project Name: TVA ASH SPILL
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 06/02/2009 11:50
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/30/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations

pH: 8.33 pH Units
Chlorine, residual:
Conductivity: 225 uMHO
Temperature: 23.80
Dissolved Oxygen: 11.40 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.040J	µg/L	0.029	0.2	A Wilson	6/9/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: N00004606010
Project Name:
Sample Description: CLINCH Rr TVA DISCHARGE POINT
Sampler Project Name: TVA ASH SPILL
Project Site No.: 5A
Station No.: KINGASHOUTF2
Date/Time Collected: 06/02/2009 11:59
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/30/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations
pH: 8.09 pH Units
Chlorine, residual:
Conductivity: 223 uMHO
Temperature: 23.88
Dissolved Oxygen: 10.42 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	06/04/2009				S Ufegbu	6/4/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	220	µg/L	2.9	10	A Bass	6/27/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	340	µg/L	64.0	100	A Wilson	6/20/2009
Antimony	0.33J	µg/L	0.33	1	A Wilson	6/20/2009
Arsenic	2.3J	µg/L	0.93	5	A Wilson	6/20/2009
Barium	49	µg/L	2.5	5	A Wilson	6/20/2009
Beryllium	U	µg/L	0.11	1	A Wilson	6/20/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/20/2009
Chromium	3.9J	µg/L	2.0	5	A Wilson	6/20/2009
Cobalt	0.38J	µg/L	0.04	1	A Wilson	6/20/2009
Copper	3.9	µg/L	0.38	1	A Wilson	6/20/2009
Lead	0.47J	µg/L	0.10	1	A Wilson	6/20/2009
Manganese	45	µg/L	0.42	1	A Wilson	6/20/2009
Nickel	2.0	µg/L	0.25	1	A Wilson	6/20/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/20/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/20/2009
Thallium	0.073J	µg/L	0.03	1	A Wilson	6/20/2009
Vanadium	U	µg/L	3.4	5	A Wilson	6/20/2009
Zinc	U	µg/L	1.9	5	A Wilson	6/20/2009

Lab-Sample Number: N00004606010
Project Name:
Sample Description: CLINCH Rr TVA DISCHARGE POINT
Sampler Project Name: TVA ASH SPILL
Project Site No.: 5A
Station No.: KINGASHOUTF2
Date/Time Collected: 06/02/2009 11:59
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Chattanooga
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 06/30/2009
Date/Time Received: 06/03/2009 09:05
Received By: L Barrociere

Field Determinations
pH: 8.09 pH Units
Chlorine, residual:
Conductivity: 223 uMHO
Temperature: 23.88
Dissolved Oxygen: 10.42 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.030J	µg/L	0.029	0.2	A Wilson	6/9/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: N00004606011

Project Name:

Sample Description: CLINCH Rr MILE 4.5 NEAR SUGAR GROVE V.

Sampler Project Name: TVA ASH SPILL

Project Site No.: 6

Station No.: CLINC004.5RO

Date/Time Collected: 06/02/2009 12:10

Sampler's Name: GEOFF KLEIN

County: ROANE - 73

Sample Matrix: Water

EFO: Chattanooga

Sampling Agency: TDEC-WPC

Billing Code: 327.34-20

Send Report To: TDEC-WPC

Agency Invoiced: TDEC-WPC

Priority Date: 06/30/2009

Date/Time Received: 06/03/2009 09:05

Received By: L Barrociere

Field Determinations

pH: 8.44 pH Units

Chlorine, residual:

Conductivity: 224 uMHO

Temperature: 23.88

Dissolved Oxygen: 11.75 mg/L

Other:

Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	06/04/2009				S Ufegbu	6/4/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	200	µg/L	2.9	10	A Bass	6/27/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	U	µg/L	6.4	10	A Wilson	6/3/2009
Antimony	U	µg/L	0.33	1	A Wilson	6/3/2009
Arsenic	U	µg/L	0.93	5	A Wilson	6/3/2009
Barium	42	µg/L	2.5	5	A Wilson	6/3/2009
Beryllium	U	µg/L	0.11	1	A Wilson	6/3/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/3/2009
Chromium	2.9J	µg/L	2.0	5	A Wilson	6/3/2009
Cobalt	0.30J	µg/L	0.04	1	A Wilson	6/3/2009
Copper	3.3	µg/L	0.38	1	A Wilson	6/3/2009
Lead	0.41J	µg/L	0.10	1	A Wilson	6/3/2009
Manganese	35	µg/L	0.42	1	A Wilson	6/3/2009
Nickel	2.2	µg/L	0.25	1	A Wilson	6/3/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/3/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/3/2009
Thallium	U	µg/L	0.03	1	A Wilson	6/3/2009
Vanadium	U	µg/L	3.4	5	A Wilson	6/3/2009
Zinc	U	µg/L	1.9	5	A Wilson	6/3/2009

Lab-Sample Number: N00004606011

Project Name:

Sample Description: CLINCH Rr MILE 4.5 NEAR SUGAR GROVE V,

Sampler Project Name: TVA ASH SPILL

Project Site No.: 6

Station No.: CLINC004.5RO

Date/Time Collected: 06/02/2009 12:10

Sampler's Name: GEOFF KLEIN

County: ROANE - 73

Sample Matrix: Water

EFO: Chattanooga

Sampling Agency: TDEC-WPC

Billing Code: 327.34-20

Send Report To: TDEC-WPC

Agency Invoiced: TDEC-WPC

Priority Date: 06/30/2009

Date/Time Received: 06/03/2009 09:05

Received By: L Barrociere

Field Determinations

pH: 8.44 pH Units

Chlorine, residual:

Conductivity: 224 uMHO

Temperature: 23.88

Dissolved Oxygen: 11.75 mg/L

Other:

Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.050J	µg/L	0.029	0.2	A Wilson	6/9/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected